

NAVAL WAR COLLEGE
Newport, RI

INFORMATION MANAGEMENT: THE JOINT TASK FORCE'S KEY
TO ACHIEVING INFORMATION SUPERIORITY

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Joint Military Operations Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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16 May 2000

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20000912 150
STC QUALITY INSPECTED 4

3 A REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority: N/A			
3. Declassification/Downgrading Schedule: N/A			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: NWC Code 1C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): Information Management: The JTF's Key to Achieving Information Superiority. (U)			
9. Personal Authors: Lieutenant Colonel. Thomas Brandl, U. S. Marine Corps			
10. Type of Report: FINAL		11. Date of Report: 16 May 2000	
12. Page Count: ■ 20			
13. Supplementary Notation: A paper submitted to the Faculty of the Joint Military Operations Department in partial consideration for a Masters Degree in Strategic Studies and National Security. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Dept of the Navy.			
14. Ten key words that relate to your paper: Information Management, Information Superiority, Decisive Operations, CCIR, Request for Information, Full Spectrum Dominance, Joint Vision 2010,			
15. Abstract: Joint Vision 2010 identifies information superiority as the key enabler for decisive operations and, ultimately, full spectrum dominance. Advances in information and sensor technologies have exponentially increased the quantity of information that a JTF receives. However, simply having access to vast amounts of information does not guarantee that a JTF will achieve information superiority. The information must be properly processed and disseminated. Therefore information management (IM) is one of the most critical challenges that a JTF faces—one that it must successfully surmount in order to achieve information superiority. Despite great progress in IM training and doctrine in the past few years, IM remains a challenge to JTFs. The key to successful IM in a JTF is to develop a successful information management plan (IMP) and the commander's involvement in all aspects of IM. The IMP should contain comprehensive instructions and procedures for the collection, processing, prioritization and dissemination of information. Clearly, information management (IM) is a challenge and must be resolved in order to realize the full spectrum dominance envisioned in JV 2010.			
	Unclassified	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: JMO Department			
19. Telephone: 841-6461		20. Office Symbol: C	

Abstract of

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Joint Vision 2010 identifies information superiority as the key enabler for decisive operations and, ultimately, full spectrum dominance. Advances in information and sensor technologies have exponentially increased the quantity of information that a JTF receives. However, simply having access to vast amounts of information does not guarantee that a JTF will achieve information superiority. The information must be properly processed and disseminated. Therefore, information management (IM) is one of the most critical challenges that a JTF faces—one that it must successfully surmount in order to achieve information superiority. Despite great progress in IM training and doctrine in the past few years, IM remains a challenge. The key to successful IM in a JTF is to develop a successful information management plan (IMP) and the commander's involvement in all aspects of IM. The IMP should contain comprehensive instructions and procedures for the collection, processing, prioritization and dissemination of information.

**Information Management:
The Joint Task Force's Key
to Achieving Information Superiority**

INTRODUCTION

Joint Vision 2010 (JV 2010), the U.S. military's conceptual framework for the future, identifies information superiority as the primary enabler for conducting decisive operations. Information superiority is "the capability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same."¹ This capability will provide commanders with near real-time situational awareness, optimum decentralized command and control (C2), and the ability to operate within an opponent's decision cycle.²

It is envisioned that information superiority, along with technological innovation, will "transform traditional ideas about . . . [the battlespace functions] into four powerful new operational concepts: dominant maneuver, precision engagement, full-dimensional protection, and focused logistics." Together, these new concepts will allow joint forces to

¹ Joint Chiefs of Staff, Concept for Future Joint Operations: Expanding Joint Vision 2010, (Washington, D.C.: May 1997), 35.

² Ibid., 66-67.

achieve full spectrum dominance—the ability to "dominate any adversary and control any situation in any operation."³

The "uninterrupted flow of information" intrinsic to the concept of information superiority is already a reality. Today's command, control, communication, computer and intelligence (C4I) systems provide a joint task force (JTF) commander and staff with continuous and unprecedented amounts of information. Moreover, future advances in information and sensor technologies portend exponential increases in the quantity of accessible data.

Simply having access to tremendous amounts of information, however, does not guarantee that a JTF will achieve information superiority. Collected data must still be carefully processed and disseminated. Without these important management functions, the staggering volumes of available information will only thicken the fog of war rather than dissipate it.

In view of the preceding paragraphs, information management (IM) is one of the most significant challenges that a JTF headquarters faces—one that it must successfully surmount in order to gain information superiority and achieve JV 2010's full spectrum dominance. This paper will examine key issues surrounding IM in a JTF headquarters. First, it will present background information regarding recent training

³ Ibid., 2.

and doctrine developments aimed at improving IM. Next, it will discuss the IM challenges experienced by some JTFs, and the reasons why other JTFs achieve success. Finally, the paper will conclude by providing some recommendations for successful IM in future JTF headquarters.

BACKGROUND

Information management (IM) refers to the processes by which information is obtained, manipulated, directed and controlled. It includes the tasks a JTF performs in the collection, creation, processing, dissemination, storage, retrieval, protection, and destruction of information.⁴

Plainly stated, the goal of successful IM is to provide the right information, in the right format, at the right time, to the right user (usually a decision-maker), in order for that user to make a decision or take required action. While some of the information a JTF headquarters receives is in an immediately-usable form, the majority of it emanates as raw data that must first be processed in order to be of value to the user.

"The critical thing is not the amount of information, but key elements of information, available when needed and in

⁴ Air Land Sea Application Center, JTF-IM: Multiservice Procedures for Joint Task Force Information Management, (Langley Air Force Base, VA: Apr 1999), I-1.

useful form, which improve the commander's [and staff's] awareness of the situation and ability to act."⁵

However, locating and recognizing these "key elements of information" in the staggering mounds of information has become an increasingly challenging endeavor.

Fortunately, there have been a number of doctrinal and training developments in the last few years aimed at alleviating a JTF headquarters' IM challenges. The following paragraphs will highlight some of these initiatives.

The concept of the *commander's critical information requirements* (CCIR) has recently been formalized in joint doctrine. CCIR is "a comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management and the decision making process that affect successful mission accomplishment."⁶

CCIR is an important IM tool because it serves as a means of focusing the staff's efforts toward collecting, processing, and reporting critical information needed by the JTF commander to make key operational decisions. This can be information about the enemy, friendly forces, or the operational environment. The JTF commander, assisted by the staff,

⁵ U.S. Marine Corps, Command and Control (MCDP 6) (Washington, D.C.: October 4, 1996), 51.

⁶ Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms (Joint Pub 1-02) (Washington, D.C.: Mar 23, 1994, as amended Jun 29, 1999), 106.

identifies CCIR at the outset of crisis action planning. The initial requirements may pertain to information the commander needs to make planning related decisions and to determine the best course of action during the commander's estimate of the situation. During subsequent war gaming and synchronization drills, the commander identifies CCIR pertaining to execution. As the operation unfolds, the CCIR must constantly be reassessed for relevance in light of the present and anticipated situation.⁷

Another key IM-related doctrinal concept related to CCIR is the *request for information* (RFI). An RFI is "any specific time-sensitive ad hoc requirement for intelligence information or products to support an ongoing crisis . . ."⁸ RFIs are also used to request information of an operational nature.

The RFI process provides a means to forward, track, and receive responses to RFIs. It is one of the primary ways for JTF and component commanders and staff sections to obtain information they need for planning or decision-making. The process should allow for transmission of RFIs throughout the JTF, as well as to the CINC staff and adjacent organizations. Ideally, it should also provide a method for monitoring the status of pending RFIs.

⁷ Air Land Sea Application Center, IV-1.

⁸ Joint Chiefs of Staff, 397.

IM has also seen progress in the area of joint tactics, techniques and procedures (TTP) development. For instance, in April 1999 the Air-Land-Sea Application (ALSA) Center published *Multiservice Procedures for Joint Task Force Information Management*. This highly instructive manual, prepared under the direction of the four Services' training and doctrine chiefs, provides information on all aspects of JTF IM. Topics include: staff duties and responsibilities, IM systems, establishing IM processes and procedures (including those for CCIR and RFI), information protection, and guidance for developing a JTF information management plan (IMP).⁹

There have also been increased efforts to improve JTF IM in the area of joint training and exercises. U.S. Joint Forces Command (USJFCOM), in its role as the joint force trainer, integrator, and provider, has developed a comprehensive training program designed to prepare JTF commanders and their staffs in planning and executing joint operations. In the last several years, IM has been one of the key training objectives on which USJFCOM exercise Observers/Trainers have focused in nearly all of the JTF-level exercises they have supported.¹⁰ Currently, they are developing a JTF

⁹ Air Land Sea Application Center, iii-vii.

¹⁰ LCDR Marcus Hitchcock, Joint Deployable Training Team, U.S. Joint Forces Command, interview by author, 24 Mar 2000, Joint Training, Analysis, and Simulation Center, Suffolk, VA.

Information Management Handbook that complements the ALSA Center manual discussed in the preceding paragraph.

Based on the discussion above, one could easily argue that the U.S. military is on the threshold of mastering the IM challenge. After all, a great deal of IM doctrinal, training, TTP, and technological progress has been made in the last few years. While this is true, the results of recent operations and exercises show that managing information continues to challenge joint force headquarters. The next section will examine this in more detail.

INFORMATION MANAGEMENT CHALLENGES

While great strides have been made in the IM arena, many difficulties still persist. A review of after action documents and Joint Uniform Lessons Learned System (JULLS) reports from recent operations and exercises indicates that IM remains a significant challenge for many JTF headquarters. (Appendix A provides a listing of specific exercises and operations whose JULLS reports were reviewed for this paper.)

In a post-operation briefing, Admiral Ellis, the Commander of JTF Noble Anvil during Operation Allied Force, lauded the information technologies that supported his headquarters. However, he cited a need for "controls" to prevent information saturation from adding to the fog of war and lengthening decision cycle times. He also identified a

problem with critical information being posted on the JTF web page instead of "pushed" to the person needing it. Finally, he discussed the use of video teleconferencing (VTC). He pointed out that VTC is a powerful tool, but if used improperly it can consume a great deal of the leaders' and staffs' time. Furthermore, it can easily lead to "misinterpretation as key guidance is filtered down to lower staff levels."¹¹

A more recent indication of the continuing JTF IM challenges is U.S. Pacific Command's (USPACOM) ongoing Joint Mission Force program. As part of this initiative, USPACOM solicited input from its component commands on the greatest challenges to conducting seamless JTF operations. The numerous responses were compiled into a "Top 10 Challenges" list. Six of the ten challenge categories cited relate to information management. The three most notable IM problems identified in the document are: the need for standardized JTF SOPs that address information management and staff procedures, the need for standardized collaborative planning tools, and the lack of standardized systems, procedures, and applications for establishing common operational and logistical pictures;¹²

RFI management surfaced as a problem area in a number of JULLS reports. There were a number of different factors that

¹¹ Admiral James O. Ellis, "A View From the Top," Slides from briefing by CJTF Noble Anvil during Operation Allied Force, Undated.

created difficulties with RFIs: the tremendous volume of generated RFIs, particularly during the planning phase (one JTF had over 140,000 RFI's in a 24-hour period); a lack of understanding by JTF staff members on the RFI process; insufficient training and rehearsals of RFI procedures; and lack of a system to screen RFIs and avoid duplication.

With all the recent initiatives to improve IM, why do JTFs continue to experience these challenges? The most consequential and far-reaching factor, mentioned in several of the after action documents, is the ad hoc nature in which most JTFs are established. Except for a small number of mission-specific JTFs (e.g., JTF-6 for counter-drug operations and JTF Civil Support), Service manpower requirements preclude the formation of permanent JTF headquarters. As a result, combatant CINCs must establish JTF headquarters when crises emerge by tasking one of their service components to provide a commander (usually a 3-star) and "core" staff. They are then augmented with personnel from other Service components to create a "joint" headquarters.

Although the warfighting CINC's have pre-designated "core" staffs for potential contingencies, this method of forming a JTF headquarters still results in a conglomerate organization that is initially very inefficient. Many members have never been on a JTF staff and are unfamiliar with the

¹² U.S. Pacific Command, "Joint Mission Force 'Top 10 Challenges,'" Slides from briefing to CINC U.S. Pacific Command, April 18, 2000.

joint TTP and terminology associated with IM. This problem is exacerbated if the JTF headquarters has not developed good IMP and does not conduct IM training.

Successful Information Management

Even with the IM challenges outlined in the preceding paragraphs, the situation is not all bad. There have been JTFs that achieved relative success in managing the immense flow of information into, out of, and within their headquarters. What made them successful?

Once again, a review of JULLS and various post-exercise reports reveals several key attributes common to the JTFs who met the IM challenge. These attributes included: developing an effective IMP, using a JTF home page, close involvement by the commander, and dedicating sufficient resources to IM.

The most significant factor that contributed to IM success was the development and early distribution of a JTF IMP. This allowed JTF members to quickly become familiar with IM processes and to conduct rehearsals to validate procedures and information flow. Particularly effective IMPs included instructions for IM staff manning and organization, IM systems, RFI and CCIR management, JTF web site procedures, common operating picture and GCCS requirements, and information protection.

The establishment of a user-friendly JTF home page, run on the SIPRNET, was another factor cited in JULLS as greatly facilitating JTF IM. Successful JTFs established a user-friendly format that allowed efficient categorization and quick access to available operational and tactical information. The home page was used to manage the RFI process; and to post CCIRs, planning documents, orders, and other pertinent information.

The JTF commander's close involvement in IM issues also played a critical role in meeting the IM challenge. As approval authority for the IMP and the C4I plan, the JTF commander's careful review of these plans ensured they fully supported IM within the JTF headquarters.

By establishing clear and concise CCIR, the JTF commander provided focus to the staff's IM efforts and enabled them to prioritize the collection, processing and reporting of information. By remaining highly accessible to the staff, he facilitated their ability to keep him updated on the operational situation and allowed him greater opportunity to provide them guidance on his information requirements.

Dedicating sufficient resources to IM was a key determinant for IM success in several JTFs. Information managers were assigned in each JTF staff section. They managed the RFI process, updated the JTF homepage, and coordinated their section's overall information management

efforts. On the technology side, having sufficient computer terminals with JTF home page access was cited as a key requirement for IM.

SUMMARY AND RECOMMENDATIONS

Despite the emphasis that information management has received in the past several years, it remains a challenge for many JTF headquarters. Some JTFs have enjoyed a moderate degree of success with the training, doctrine, and TTP initiatives discussed in the previous sections. With further refinement and development, JTFs will become more effective in the future. The following recommendations are provided for consideration.

Component headquarters that have been identified as "core" JTF Staffs should develop a detailed IMP based upon the recommendations contained in the ALSA Center publication. To the maximum extent possible, warfighting CINCs should attempt to standardize the IMPs of their designated JTF cores. This will help foster greater familiarization of IMP procedures and cut down on the steep IM learning curve that JTFs encounter when they are initially formed.

RFI management is one of the most critical IM processes that a JTF must perform. It is essential that the IMP provides for a robust and flexible process for RFI administration. The RFI procedures and system need to be capable of handling large

volumes of information requests. At the same time, the RFI process should contain mechanisms for tracking requests and preventing duplication.

Information management is the responsibility of everyone in the headquarters—not only the J6 and the information management officer. Successful IM starts with the commander. His clear emphasis on the importance of IM will set the tone within the JTF headquarters and ensure the IMP policies are enforced and carried out. Everyone must be thoroughly familiar with IM procedures. Each section must be manned with sufficient IM personnel and equipped with required IM systems in order to realize this goal.

Today's information technologies allow JTF staff members, to communicate, request and provide information, issue orders, and a myriad of other tasks, without leaving their desks. However, they must remember that posting information on a web site does not mean the intended audience will see it. Conducting business by e-mail, while efficient, is not always as effective as face-to-face staff interaction and coordination. As one recent JTF commander stated, "You can only manage from your [desk top computer], you cannot lead from it."¹³

CINC-level solutions must also be found to alleviate the IM problems associated with standing up the JTF headquarters.

¹³ Admiral Ellis.

Standardization of JTF IMPs, mentioned above, is a start. The CINCs' Deployable JTF Augmentation Cell should be manned with IM "specialists" who can assist the JTF staff with their IM efforts.

CONCLUSION

General Gary Luck, U.S. Army (Retired) and Lieutenant General Steve Croker, U.S. Air Force (Retired), both senior mentors for JTF commanders during USJFCOM JTF exercises, have declared information management one of the "Keys of the Kingdom" for JTF success.¹⁴ As the U. S. Armed Forces move further into the information age, the requirement to successfully manage information becomes clearly an imperative.

Successful information management is essential if joint task forces are to achieve information superiority. By gaining information superiority, the JTF gains the ability to operate inside an opponents decision cycle. Thus, a decisive advantage is gained and, ultimately, the JTF is able to dominate across the entire battlespace.

In the future, it will be just as important to gain and maintain information superiority as it is to gain and maintain sea and air superiority today. While technologies will certainly make it easier to do this, the human dimension will

still remain in maximizing the emerging information technologies described above:

The enduring C2 function rests on planning, conceptualizing, applying experience, and making sound decisions. While information superiority will provide the commander with better and more timely information and sophisticated decision aids, and will allow the decision cycle to operate at a higher tempo, C2 will still be about the commander's judgement, experience, instincts, and wisdom. These traits will remain of ultimate importance in the battle space despite advances in technology.¹⁵

¹⁵ JCS, Concept for Future Joint Operations, 66.

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APPENDIX A

Joint Universal Lessons Learned System & Other Reports Consulted

Exercise

United Endeavor 95
United Endeavor 96-1
United Endeavor 96-2
United Endeavor 97-1
Agile Lion 97
Tandem Thrust 97
Matadore 98
JTFEX 98-1
United Endeavor 98-2
Fuertas Defensas 98/99
RSOI 99

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